**Research need for Cape Wind project and offshore wind turbines in general: Do offshore wind turbine structures induce aggregations of migratory landbirds?**

One of the outstanding questions is what the impact will be to birds from a project such as Cape Wind, and of greater concern is the avian impact from the overall pending build out of offshore turbines in eastern North America. Preconstruction evaluation of this impact is extremely difficult due to the fact that wind turbine mortality appears to have a site specific nature and preconstruction methods for evaluating fatality risk are only in the very early stages of providing fatality prediction information. Radar and visual observation methods have been employed to partially characterize natural avian usage patterns of the proposed Cape Wind project area but the resulting data tell us little, if anything, about what the avian mortality would be from the proposed wind project.

What is gravely missing is any study of whether the proposed turbine structures will attract migratory landbirds. Any degree of attraction will lead to unnatural aggregations near the turbine structures and potentially greater avian collision risk. This is especially of concern for a large number of night-migrating landbird species, which are documented to pass over Nantucket Sound and most of our Atlantic and Gulf coastal waters in large numbers. Landbirds weary from a lengthy water crossing may be attracted to the turbine structures in search of a perch to rest. In addition, some types of landbirds (songbirds in particular) aggregate in the vicinity of artificial lighting on low cloud ceiling or rainy nights. While the individual types of lighting proposed to be on the Cape Wind turbines (red flashing aviation obstruction lighting; amber flashing marine obstruction lighting) is not known to induce aggregations in terrestrial situations, it can not be assumed that the gestalt of these two lighting systems will not induce aggregation at sea for landbirds making long water crossings.

Actual fatalities at offshore wind energy facilities will be extremely difficult to survey with any reasonable degree of confidence. However, if it could be demonstrated that the Cape Wind turbine/platform structures will have minimal aggregation tendency for night migrating landbirds, especially in foggy or low cloud ceiling conditions, this would go a long way toward alleviating concerns about offshore wind energy regarding impact to migratory landbirds.

The question of whether offshore wind turbines cause migratory landbird aggregation could perhaps best be documented using a combination of automated thermal imaging, radar, and acoustic monitoring technologies. Until this “landbird aggregation” question for offshore turbines is satisfactorily determined, offshore wind development will be seen as potentially having a significant impact to many migratory landbird populations.

Respectfully submitted,

William R. Evans
Executive Director
Old Bird, Inc.
605 W. State St.

Ithaca, NY  14850